

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Claims 7-11 and 17-20 are present in this application. Claims 1-6 and 12-16 are canceled. Claims 7 and 17 are rewritten in independent form. Claims 1, 2, 7-13, and 17-20 are rejected under 35 U.S.C. §102(b) over U.S. 4,145,739 (Dunning et al.) and claims 3-6 and 14-16 are rejected under 35 U.S.C. §103(a) over Dunning et al. in view of U.S. 5,822,779 (Intrater et al.).

The present invention is directed to a processor having a processor core, an extension unit and a direct memory access controller connected to both the processor core and the extension unit. The extension unit has a first execution unit, and the first execution unit is reconfigurable. A non-limiting example of a reconfigurable unit is provided in the specification on page 36. First execution unit 37 is reconfigurable, allowing the function to be changed. An FPGA may be used as a reconfigurable extension unit.

Turning to the rejection over Dunning et al., the Office Action makes reference to columns 9 and 10, in particular “the hardware status of the slave commands,” in arguing that Dunning et al. discloses a processor having a reconfigurable first execution unit. According to lines 19-24 of column 9, a STATUS command is a request to the slave to send its hardware status and its device identification. The slave returns NOT RUNNING, BAD PARITY or LINE ERROR, for example. Only one byte is returned, with bits D0-D3 being the hardware status and bits D4-D7 being the device ID (column 9, lines 55-59).

Columns 9 and 10 simply describe the transfer of commands and data, and in particular only the returning of status data by a slave device in response to a status inquiry. There is, clearly, no mention of any circuit being reconfigurable. There is also no mention of any function of any circuit being changed. The transfer of commands and data does not disclose or suggest a reconfigurable circuit, only the operation of a circuit in response to a

command without any mention of whether the circuit may be a reconfigurable circuit. As there is no mention of a processor having a reconfigurable first execution unit as recited in either of claims 7 and 17 in Dunning et al., the §102(b) rejection of claims 7 and 17 should be withdrawn.

The Office Action includes a discussion directed to claim 12 in paragraph 9. The discussion distinguishes between the semiconductor “integrated circuit” and the semiconductor “chip” stating that “nowhere does applicant[‘s] claim recite [a] processor core, extension unit and direct access memory controller are all integrated on one semiconductor chip” and “[t]he evidence shows that a semiconductor chip was a part of the semiconductor integrated circuit along with other circuit components.” Claim 17 recites a “semiconductor chip” and a processor core, extension unit and direct access memory controller all “integrated on the semiconductor chip.” The language is very clear that these three components are all integrated on the recited semiconductor chip. The Applicant respectfully requests that claim 17 be reviewed to confirm this language.

There is no argument that Dunning et al. is directed to a system with separate components, as was explained in the previous response. The rejection of claim 17 over Dunning et al. should also be withdrawn as there is clearly no disclosure of the processor of claim 17 in Dunning et al.

The amendments made to the application are only cancelling a number of claims and rewriting two claims into independent form. Such changes are permitted under 37 CFR §1.116, and entry of the present amendment is proper. Entry thereof is respectfully requested.

It is respectfully submitted that the present application is in condition for allowance, and a favorable decision to that effect is respectfully requested.

Application No. 10/687,629  
Reply to Final Office Action of December 4, 2006

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



---

Eckhard H. Kuesters  
Attorney of Record  
Registration No. 28,870

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 06/04)

Carl E. Schlier  
Registration No. 34,426